



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,411	01/30/2002	Koichiro Kawaguchi	01272.020504	4733

5514 7590 08/02/2004

FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

COLILLA, DANIEL JAMES

ART UNIT PAPER NUMBER

2854

DATE MAILED: 08/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/058,411

**Applicant(s)**

KAWAGUCHI ET AL.

**Examiner**

Dan Colilla

**Art Unit**

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 and 6-15 is/are allowed.
- 6) ☒ Claim(s) 16-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by Miyazaki et al.

Miyazaki et al. discloses a printing method performed by an apparatus (Figure 1 of Miyazaki et al.) including the steps transporting a printing medium (transporting means not shown) (Miyazaki, col. 5, lines 11-12), moving a carriage without printing (and thus vibrating the transporting means) (Miyazaki et al. col. 5, lines 17-18) and then printing (Miyazaki et al., col. 5, lines 18-20).

3. Claim 19 is rejected under 35 U.S.C. 102(e) as being anticipated by Matsumoto.

Matsumoto discloses a printing apparatus including a carriage 404, a carriage motor 407, a transportation roller 302 and a transportation roller motor 309. The carriage travels in a direction crossing a direction that the print medium P is travels as shown in Figures 1 and 3 of Matsumoto.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazaki et al. as applied to claim 16 above, and further in view of Matsushashi.

Miyazaki et al. discloses the claimed method except that it is not known to the examiner what type of transportation means is used in the Miyazaki et al. patent. However, Matsushashi teaches that a printer transporting means that includes movable rollers 12 and 34 for moving and stopping the print medium T. These rollers are held in a stable stopped position when the printhead 5 scans across the print medium. The roller 34 is biased against the roller 12 by spring 36 and the roller 12 is driven by motor 18 (Matsushashi, col. 7, lines 13-14). It would have been obvious to combine the teaching of Matsushashi with the method disclosed by Miyazaki et al. for the advantage of the ink capturing means that captures excess ink that misses the print medium T and prevents the printer from becoming soiled with ink (Matsushashi, col. 2, lines 29-37).

***Allowable Subject Matter***

6. Claims 1-4 and 6-15 are allowed.

*Response to Arguments*

7. Applicant's arguments filed 5/24/09 have been fully considered but they are not persuasive of any error in the above rejection.

With respect to claim 19, applicant refers to remarks filed on 4/19/04. In these remarks, applicant argues that Matsumoto does not disclose the same order of operations as recited in the claim. However, as noted in the advisory action mailed on 5/3/04, since claim 19 is directed towards an apparatus, the functional language regarding how the apparatus is used is give no patentable weight. See MPEP § 2114.

With respect to the claim 16, Miyazaki et al. discloses several steps of printing. One of which is performed after the transporting step and before a printing step as shown below in an image taken from the text of col. 5 of Miyazaki et al.:

When the printing for the extension printing region M is completed, the carriage control means 24 decelerates the carriage 1 and stops it at a preset position. Then, the carriage control means 24 moves the carriage 1 to the end point E1 again and the paper-feed control means 23 feeds the paper by one dot.

10 transporting step completed

Of the data for the extension printing region M, the print data for the lines which are shifted from the lines printed in the previous printing operation, i.e., the second, sixth, tenth, fourteenth, . . . lines, is extracted by the print data extracting means 22. The carriage 1 is moved again toward the home position HP as in the previous printing operation. When it reaches the left end of the paper, the printing operation starts, to thereby print dots under the line previously printed (FIG. 6(II)).

15

moving carriage and thus vibrating

20

printing

Such a printing operation is repeated a plural number of times, e.g., two times in the present embodiment, to thereby print the third, seventh, eleventh, fifteenth, . . . lines (FIG. 6(III)), and the fourth, eighth, twelfth, . . . lines (FIG. 6(IV)). As a result, the printing for the paper area corresponding to the width of one line (when viewed in the paper feeding direction) in the normal print mode is completed.

25


Art Unit: 2854

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Colilla whose telephone number is (571)272-2157. The examiner can normally be reached Mon.-Thur. between 7:30 am and 6:00 pm. Faxes regarding this application can be sent to (703)872 - 9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached at (571)272-2168. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 26, 2004

  
Daniel J. Colilla  
Primary Examiner  
Art Unit 2854